


<b>PRE-APPEAL BRIEF REQUEST FOR REVIEW</b> 	Application Number	10/848,831
	Filing Date	May 19, 2004
	First Named Inventor	Bredt.
	Atty Docket Number	ZCO-100
	Art Unit	1773
	Examiner	Sheeba Ahmed

### CERTIFICATE OF MAILING OR TRANSMISSION

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, or facsimile transmitted to the U.S. Patent and Trademark Office on the date shown below.

Signature <i>Carrah Malone</i>	
Name (Print/Type) Carrah Malone	Date May 1, 2007

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).  
Note: No more than five (5) pages may be provided.

I am the

☐ applicant/inventor

*Natasha C. Us*  
\_\_\_\_\_  
Signature

☐ assignee of record of the entire interest.

See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.  
(Form PTO/SB/96)

Natasha C. Us  
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Registration number if acting under 37 CFR 1.34. \_\_\_\_\_

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

LIBC/2973081



**PATENT**  
Attorney Docket No. ZCO-100  
(120573/158152)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

APPLICANTS:       Bredt *et al.*  
SERIAL NO.:       10/848,831               GROUP NO.:       1773  
FILING DATE:       May 19, 2004           EXAMINER:       Sheeba Ahmed  
TITLE:             THERMOPLASTIC POWDER MATERIAL SYSTEM FOR  
                      APPEARANCE MODELS FROM 3D PRINTING SYSTEMS

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**COMMENTS ACCOMPANYING PRE-APPEAL BRIEF REQUEST FOR REVIEW**

This paper is submitted along with a Pre-Appeal Brief Request for Review in accordance with the Official Gazette Notice dated July 12, 2005, and a Notice of Appeal in response to the Office action mailed by the U.S. Patent and Trademark Office on December 1, 2006, and the Advisory Action mailed March 23, 2007. A check for payment of the fee for filing the Notice of Appeal and for a one-month extension of time is submitted herewith, as well a petition for a one-month extension of time, since Applicants' response was filed within two months of the final Office action. Applicants believe that no additional fee is required for this submission to be entered. However, please consider this a conditional petition for the proper extension, if one is required, and a conditional authorization to charge any related extension fee, or any other fees, necessary for entry of this submission to Deposit Account No. 07-1700.

Applicants' **Remarks** begin on page 2 of this paper.

### **REMARKS**

The Examiner has improperly rejected independent claims 1, 25, 40, 60, 76, 78, 80, 82, and 83 under 35 U.S.C. § 102(b) as being unpatentable over U.S. Patent No. 5,387,380 to Cima et al. (“Cima”). The Examiner has also improperly rejected independent claims 1, 25, 40, 60, 76, 78, 80, 82, and 83 under 35 U.S.C. § 102(b) as being unpatentable over U.S. Patent No. 5,902,441 to Brecht et al. (“Brecht”). The Examiner’s continued refusal to acknowledge the recitation in the claims of thermoplastic particulate material, as well as the combination of a thermoplastic particulate material with an adhesive particulate material, constitute clear factual deficiencies in the rejections.

In the present case, the Examiner failed to cite references that teach the limitations of the claims, and has not met even the basic requirements of § 102(b). As a result, the Examiner has not established anticipation.

To the limited extent Cima describes the composition of a powder material for use with a 3D printing technique, Cima merely states that the powder material may be a ceramic, metal, or plastic powder or fiber. *See* column 12, lines 11–21. The Examiner erred by ignoring the Applicants’ claim limitation of a thermoplastic particulate material recited in instant claims 1, 76, 78, 80, and 83, a feature that Cima does not disclose or suggest. Furthermore, Cima does not disclose, alone or in combination with other materials, an adhesive particulate material, as also required in independent claims 1, 76, 78, 80, and 83.

Moreover, Cima does not teach a fluid adapted to activate an adhesive in a powder including thermoplastic and adhesive particulate material, as recited in independent claims 25 and 60. Cima also does not disclose a fluid adapted to activate the adhesive properties of a thermoplastic particulate material, as recited in independent claims 40, 82, and 83.

The Examiner again erred by ignoring the same claim limitations when she asserted that Brecht anticipates the instant claims. Brecht discloses three-dimensional printing materials systems that include various powder components. These materials systems do not, however, include a thermoplastic particulate material in combination with an adhesive particulate material, as recited in independent claims 1, 76, 78, and 80. Brecht also does not disclose a fluid adapted to activate an adhesive in a powder including thermoplastic and adhesive particulate material, as

recited in independent claims 25 and 60. Bredt also does not disclose a fluid adapted to activate the adhesive properties of a thermoplastic particulate material, as recited in independent claims 40, 82, and 83. Finally, Bredt does not disclose a fluid including water and an amine, wherein the fluid is adapted to activate the adhesive properties of at least a sparingly soluble alkaline-reducible particulate material, as recited in independent claim 68.

In summary, the Examiner has ignored the recited claim limitations and thereby erred in rejecting the instant claims by failing to provide references that, alone or in combination, disclose all of the limitations of the claims.


### **CONCLUSION**

We respectfully submit that, as set forth in the foregoing remarks, there are clear errors in the Examiner's rejections.

Respectfully submitted,

Date: May 1, 2007  
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